NEWSLETTER

girep

Groupe international de recherche sur l'enseignement de la physique international Group for the Advancement of Physics Teaching Internationaler Arbeitskreis zur Förderung des Physikunterrichts

Number 2

December 1975

THE PROCEEDINGS FROM THE VENICE SEMINAR

Free of charge to all GIREP-members

As mentioned in the last Newsletter the proceedings from the seminar in Venice on the teaching of electricity, magnetism and quantum physics will be published in form of a book by the Danish publisher Gyldendal. It will be commercially available from January 16th 1976.

It is a well illustrated book of 440 pages. The price will be Dkr. 226.05 (appr. \$37), which according to the publisher just covers his expenses if all books are sold.

All present GIREP members will receive a copy of the book free of charge, provided they have paid their membership fee for 1975.

HELP TO SECURE FUTURE PUBLICATIONS

In the committee we plan to publish the proceedings from future GIREP meetings in a series of similar books called Seminar on the Teaching of Physics in Schools 3, 4, 5, However, the rapidly raising production prices on printed books may prevent us from doing so, unless we can prove it is possible to sell our publications in a number of at least 1000 printed copies.

The proceedings from the Venice seminar have been printed in 1000 copies in addition to the copies distributed free of charge. Unfortunately the publisher has suffered from an encrmous increase in production costs last year. It means that all 1000 copies <u>must</u> be sold just to cover his expenses. Therefore, the committee urgently asks for your help. Let all of us make an effort to get the book sold.

Fortunately, the GIREP books published so far have proven to be very useful for institutions dealing with didactical aspects of physics education, and the same will certainly be the case

with the new book. There seems to be a general need for such books. Therefore, it may often just be a question of showing the book to the librarians of universities or teachers training colleges to get them to buy it for the library.

Furthermore, we can help by writing or by getting other qualified people to write a review of the book in national magazins.

The title of the book is "Seminar on the Teaching of Physics in Schools 2. Electricity, Magnetism and Quantum Physics" Gyldendal 1975, and it can be ordered from

Munksgårds Importboghandel Nørregade 6 DK 1165 Copenhagen K. Denmark.

The price is Dkr. 226.05 exclusive of V.A.T. (only to be paid by Danish purchasers) and exclusive postage (payment must not be enclosed in your order form).

MEETING OF GIREP MEMBERS AT THE INTERNATIONAL CONFERENCE ON PHYSICS EDUCATION IN EDINGBURGH

About 25 members of GIREP met informally just before lunchtime one day during the Edingburgh-conference, which was held this year from July 28th to August 6th. The idea was mainly to identify the GIREP-members attending the conference and to exchange views on future GIREP-activities.

The discussion was mainly concerned with the planz for the next GIREP-meeting to be held in France in 1976.

MEETING OF THE GIREP COMMITTEE

During the Edingburgh conference the GIREP committee held a meeting to decide definitely on the next GIREP-seminar. The committee had invited professor Delacote from France, professor Tony French from USA (Organizer of the Edinburgh conference) and Dr. Joel from UNESCO to take part in the meeting.

Professor Delacote agreed to organize the next GIREP-seminar in France and proposed Montpellier as an adequace place for the conference. It was decided to aim at the first week of September as time for the seminar.

On behalf of the committee the president expressed his gratitude to UNESCO for this organizations interest, in and support of GIREP seminars. Dr. Joel confirmed that UNESCO was willing to support the next GIREP conference with a grant of US\$6000 and promised to prepare a contract between UNESCO and GIREP or a similar kind as the one set up in connection with the Venice conference. Concerning the publication of the proceedings it was decided to try to get Gyldendal, Copenhagen, to publish the proceedings as the 3rd volumn in the series "Seminar on the Teaching of Physics in Schools".

ANNOUNCEMENT OF THE GIREP SEMINAR IN MONTPELLIER IN 1976

The next GIREP seminar will take place in Montpellier, France in the first week of September 1976. Professor G. Delacote will organize the seminar. Details will follow early in the new year.

EDUCATION OF PHYSICS TEACHERS

The investigation of how Physics teachers are educated in England is nearly finished. The idea is that this investigation should serve as inspiration for similar investigations in other GIREP-countries. It will be distributed in the early spring of 1976.

FIND NEW GIREP MEMBERS

It has previously been stated by the committee that it would be adequate to have a group of at least 20 GIREP members in each country. Therefore, the committee proposes that steps are taken to reach this goal. We hope you will all be willing to assist in this and enclose for your use some copies of a paper giving up-to-date information on GIREP.

The first 40 new members, who join GIREP and pay their member-ship fee for 1976 will get the new GIREP book free of charge.

ACTIVITIES IN ITALY DURING 1974

Many in-service short courses have been organized (3-5 days) sponsored by the Ministry of Education, both at the universities and in secondary schools, in addition to those by long tradition held at the Museo Nazionale della Scineza, in Milan.

Three 4-weeks courses during the summer vacations have also been organized, with the participation of distinguished lecturers. Professor Haber-Schaim has joined one of them in Falcade.

Some of the short seminars were on integrated subjects; not only in scientific fields properly, but also with some attempts

for integrating science and humanities. Two of them were on the study of Introductory Physical Science and Physical Science II materials (produced by the IPS Group and published by the Prentice-Hall).

From October 31st to November 2nd the Italian Association for Physics Teaching (AIF) has held the annual meeting in connection with the one of the Italian Physical Society. In a joint session, the recent regulations, issued on school administration in Italy, and the possibility of educational experimentation, with special regard to physics teaching, have been discussed.

Other subjects presented in this occasion were: the problems connected with the energy shortage; a model of a laser; the teaching of astronomy; cybernetics as a basis for knowledge; a course on the history of physics, held at a high school in Rome; physics and social problems; some samples of "teaching packages" for physics in junior high school, designed by a team of the Genova University.

INFORMATION ON THE TEACHING OF PHYSICS IN GIREP-COUNTRIES

Please make your contribution to the GIREP-survey of physics education in 1975 in different countries.

The above report on activities in Italy in 1974 might serve as a good example of such a report. We hope that each national section will take part in this activity and hope that the contact members will organize the work. We would appreciate very much to receive the reports before March 1st 1976.

CORRECTION TO THE LIST OF MEMBERS 1975

By a regretable mistake two prominent members of GIREP have not been included in the list. It is::

Professor Uri Haber-Schaim
Physical Science Group
Newton College of the Sacred Heart
885 Centre Street
Newton, Massachusetts 02159
USA

and

Professor Karl Hecht
Institut für die Pädagogik der Naturwissenschaften and der Christian-Albrects-Universität Kiel
23 Kiel
Olshausenstrasse 40/60
German Federal Republic

INTERNATIONAL SYMPOSIUM ON EDUCATIONAL PHYSICS EXPERIMENTS IN SPACE

At the Royal Danish School of Educational Studies a research group consisting of associate professor Nils Hornstrup, associate professor Jørn Lyngesen and professor Poul Thomsen has started to prepare physics experiments to be carried out in the apparently gravity free space in Spacelab, the European space laboratory to be launched in 1980. This work is part of an agreement with ESA, the European Space Agency. As another responsibility the group has promised the directors of ESA to try to create international interest in this new field of research. As a follow-up action the group has now planned to arrange an international symposium on Educational Experiments in Space with special regard to the teaching of physics in secondary schools and the first university years.

The symposium will be held at The Physics Institute of The Royal Danish School of Educational Studies, probably on the 4th, 5th and 6th of May 1976. People with experience in doing experiments in space, first of all astronauts, who have done educational experiments in the American satellite "Skylab" will be invited to deliver papers and take part in the discussions. The group at The Royal Danish School of Educational studies will tell about its work, and hopefully people from many countries will present ideas of suitable experiments to be done and filmed in Spacelab. Hopefully GIREP-members will be interested in participating in this symposium. — An invitation will be sent out to all members.

ENCLOSURES

- 1. 4 copies of GIREP An Active International Association for the Improvement of Physics Teaching in Schools.
- 2. Education of Physics Teachers in Germany.
- 3. 1974 Version of the Survey on the School Systems in GIREP countries (by Maria Perretti).